



TECHNICAL DATA SHEET

POLESTER GELCOAT 91

Thixotropic Non-accelerated Unsaturated
Polyester Resin

GENERAL PROPERTIES

Polestar Gelcoat 91 is an ortho-phthalic non-accelerated high thixotropic unsaturated Appearance cloudy paste polyester resin diluted with Styrene.

SPECIAL PROPERTIES AND USE

Polestar Gelcoat 91 is a high reactive unsaturated polyester resin developed for general purposes. It exhibits outstanding good hardnoses, toughness, impact and chemical resistance. The thixotropy permits the application of coats of up to 0.6 mm thickness without sag on vertical or leaned surfaces.

APPLICATIONS

Polestar Gelcoat 91 is designed for manufacture of containers, pipe, boat, bathtub, auto parts and etc. **Polestar Gelcoat 91** can be applied by brush, roller or spay gun with a dilution form.

PACKING AND STORAGE

Steel drum, net weights 230 k

SPECIFICATION

Appearance	Clear, light yellow liquid
Viscosity (cPs.) (Brookfield, 25oC)	200 - 400
Non-volatile (%)	68 -70
Gel time (Min.) (2%MEKPO-50, 25° C)	12 - 16
Density (g/crn ³) (at 25°C)	1.09 – 1.11
Flash Point CC) (DIN 53213)	34

STORAGE STABILITY

Polestar Gelcoat 91 must be kept away from sources of ignition and heat and not in direct sunlight. It is recommended the storage temperature should not exceed 25°C, At 25°C no access of air and light storage stability is more than 6 months.



PHYSICAL PROPERTIES of cured Polestar Gelcoat 91

<u>PROPERTY</u>	<u>VALUE</u>	<u>UNIT</u>	<u>TEST METHOD</u>
Specific gravity, 25°C	1.1	g/cm ³	DIN 53479
Barcol Hardness	4.8	-	J-934-1
Elongation	3.0	%	DIN 53455
Flexural strength	85	kgf./mm ²	DIN 53452
Tensile strength	40	kgf./mm ²	DIN 53455
Impact strength	5.0	kpcm/cm ²	DIN 53453
Water absorbtion	0.3	%	5-day dipping

THERMAL PROPERTIES of cured Polestar Gelcoat 91

Thermal conductivity	0.15	kcal/m h °C	DIN 52612
Heat distortion temperature	65	°C	ASTM D 648-45T

MECHANICAL PROPERTIES of MP-001 fiber glass laminate, with 30 % chopped strand mat

<u>PROPERTY</u>	<u>VALUE</u>	<u>UNIT</u>	<u>TEST METHOD</u>
Tensile strength	90	N/mm ²	DIN 53455
Flexural strength	140	N/mm ²	DIN 53452
Impact strength	40	kpcm/cm ²	DIN 53453